

WHAT IS CLAIMED IS:

1. An electrophotographic photosensitive member comprising a support and provided thereon a photosensitive layer, wherein;

5 said electrophotographic photosensitive member has a surface layer containing:

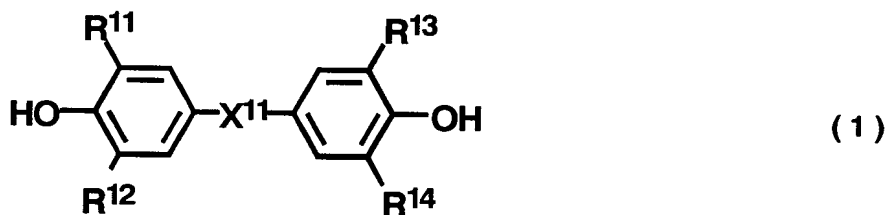
at least one of a charge-transporting material and conductive particles; and

10 a polymer obtained by polymerizing at least one selected from the group consisting of a polyhydroxymethylbisphenol monomer having 2 or 3 benzene rings and 2 to 4 hydroxymethyl groups; a polyhydroxymethylbisphenol oligomer having a structure in which a bisphenol monomer having 2 or 3
15 benzene rings has been condensed, and having 2 to 4 hydroxymethyl groups; a polyhydroxymethyltrisphenol monomer having 3 or 4 benzene rings and 2 to 6 hydroxymethyl groups; and a polyhydroxymethyltrisphenol oligomer having a
20 structure in which a trisphenol monomer having 3 or 4 benzene rings has been condensed, and having 2 to 6 hydroxymethyl groups.

2. The electrophotographic photosensitive
25 member according to claim 1, wherein said polyhydroxymethylbisphenol monomer is a polyhydroxymethylbisphenol monomer having 2 or 3

benzene rings bonded or linked through a single bond,
a carbonyl group, an ether group, a thioether group
or a $-CR^{01}R^{02}$ -group, where R^{01} and R^{02} each
independently represent a hydrogen atom, a
5 substituted or unsubstituted alkyl group having 1 to
4 carbon atoms or a substituted or unsubstituted
phenyl group, or represent a substituted or
unsubstituted cycloalkylidene group having 3 to 6
carbon atoms which is formed by combination of R^{01}
10 with R^{02} , provided that a case in which both the R^{01}
and R^{02} are substituted or unsubstituted phenyl groups
is excluded.

3. The electrophotographic photosensitive
15 member according to claim 2, wherein said
polyhydroxymethylbisphenol monomer is a
polyhydroxymethylbisphenol monomer having a structure
represented by the following Formula (1):



wherein X^{11} represents a single bond, a carbonyl group,
an ether group, a thioether group or a $-CR^{01}R^{02}$ -group,
where R^{01} and R^{02} each independently represent a

hydrogen atom, a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms or a substituted or unsubstituted phenyl group, or represent a substituted or unsubstituted cycloalkylidene group having 3 to 6 carbon atoms which is formed by combination of R^{01} with R^{02} , provided that a case in which both the R^{01} and R^{02} are substituted or unsubstituted phenyl groups is excluded; and R^{11} to R^{14} each independently represent a hydroxymethyl group, a hydrogen atom, a halogen atom, a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms other than the hydroxymethyl group, a substituted or unsubstituted cycloalkyl group having 3 to 6 carbon atoms, or a substituted or unsubstituted alkoxyl group having 1 to 4 carbon atoms, provided that at least two of the R^{11} to R^{14} are each a hydroxymethyl group.

4. The electrophotographic photosensitive member according to claim 3, wherein the X^{11} in Formula (1) is a divalent group having 3 or more carbon atoms.

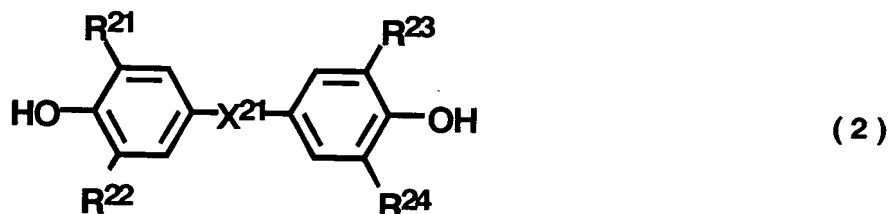
5. The electrophotographic photosensitive member according to claim 4, wherein the X^{11} in Formula (1) is a divalent group having 5 or more carbon atoms and having a cyclic structure.

6. The electrophotographic photosensitive member according to claim 3, wherein the X^{11} in Formula (1) is a divalent group having a benzene ring.

5 7. The electrophotographic photosensitive member according to claim 3, wherein the X^{11} in Formula (1) is an ether group, a thioether group or a di(trifluoromethyl)methylene group.

10 8. The electrophotographic photosensitive member according to claim 1, wherein said polyhydroxymethylbisphenol oligomer is a polyhydroxymethylbisphenol oligomer having a structure in which a bisphenol monomer having 2 or 3
15 benzene rings has been condensed which are bonded or linked through a single bond, a carbonyl group, an ether group, a thioether group or a $-CR^{01}R^{02}-$ group, where R^{01} and R^{02} each independently represent a hydrogen atom, a substituted or unsubstituted alkyl
20 group having 1 to 4 carbon atoms or a substituted or unsubstituted phenyl group, or represent a substituted or unsubstituted cycloalkylidene group having 3 to 6 carbon atoms which is formed by combination of R^{01} with R^{02} , provided that a case in
25 which both the R^{01} and R^{02} are substituted or unsubstituted phenyl groups is excluded.

9. The electrophotographic photosensitive member according to claim 8, wherein said polyhydroxymethylbisphenol oligomer is a polyhydroxymethylbisphenol oligomer having a structure in which a bisphenol monomer having a structure represented by the following Formula (2) has been condensed through a methylene group:



wherein X^{21} represents a single bond, a carbonyl group, an ether group, a thioether group or a $-CR^{01}R^{02}-$ group, where R^{01} and R^{02} each independently represent a hydrogen atom, a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms or a substituted or unsubstituted phenyl group, or represent a substituted or unsubstituted cycloalkylidene group having 3 to 6 carbon atoms which is formed by combination of R^{01} with R^{02} , provided that a case in which both the R^{01} and R^{02} are substituted or unsubstituted phenyl groups is excluded; and R^{21} to R^{24} each independently represent a hydrogen atom, a halogen atom, a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms, a substituted or

unsubstituted cycloalkyl group having 3 to 6 carbon atoms, or a substituted or unsubstituted alkoxy group having 1 to 4 carbon atoms.

5 10. The electrophotographic photosensitive member according to claim 9, wherein the X^{21} in Formula (2) is a divalent group having 3 or more carbon atoms.

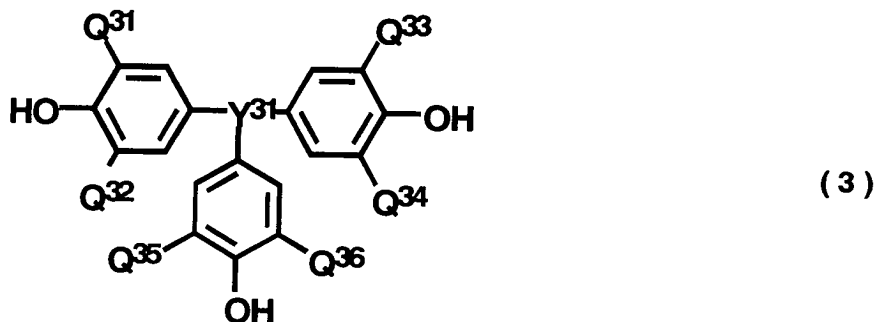
10 11. The electrophotographic photosensitive member according to claim 10, wherein the X^{21} in Formula (2) is a divalent group having 5 or more carbon atoms and having a cyclic structure.

15 12. The electrophotographic photosensitive member according to claim 9, wherein the X^{21} in Formula (2) is a divalent group having a benzene ring.

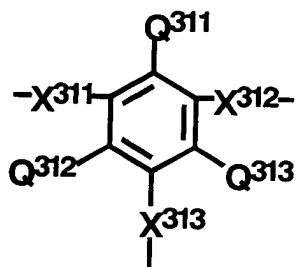
20 13. The electrophotographic photosensitive member according to claim 9, wherein the X^{21} in Formula (2) is an ether group, a thioether group or a di(trifluoromethyl)methylene group.

25 14. The electrophotographic photosensitive member according to claim 1, wherein said polyhydroxymethyltrisphenol monomer is a polyhydroxymethyltrisphenol monomer having a

structure represented by the following Formula (3):

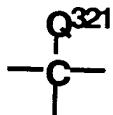


wherein Q^{31} to Q^{36} each independently represent a hydroxymethyl group, a hydrogen atom, a halogen atom, a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms other than the hydroxymethyl group, a substituted or unsubstituted alkenyl group having 1 to 4 carbon atoms, or a substituted or unsubstituted alkoxy group having 1 to 4 carbon atoms, provided that at least two of the Q^{31} to Q^{36} are each a hydroxymethyl group; and Y^{31} represents a trivalent group having a structure represented by the following Formula (31), a trivalent group having a structure represented by the following Formula (32) or a trivalent group having a structure represented by the following Formula (33):



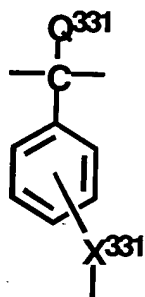
(31)

wherein X^{311} to X^{313} each independently represent a single bond, a carbonyl group, an ether group, a thioether group or a $-CR^{01}R^{02}$ -group, where R^{01} and R^{02} each independently represent a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms; and Q^{311} to Q^{313} each independently represent a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms;



(32)

wherein Q^{321} represents a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms; or



(33)

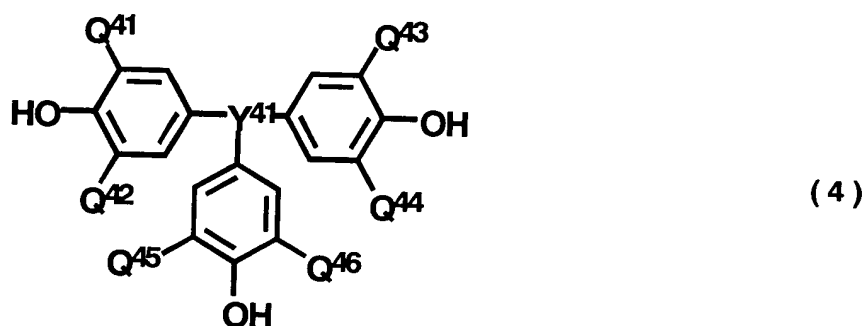
wherein X^{331} represents a single bond, a carbonyl group, an ether group, a thioether group or a $-CR^{01}R^{02}-$ group, where R^{01} and R^{02} each independently represent a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms; and Q^{331} represents a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms.

15. The electrophotographic photosensitive member according to claim 14, wherein at least one of the X^{311} to X^{313} in Formula (31) or the X^{331} in Formula (33) is a divalent group having 3 or more carbon atoms.

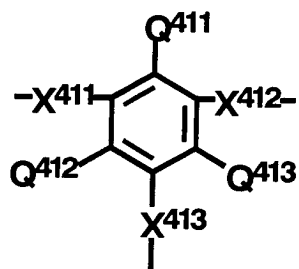
16. The electrophotographic photosensitive member according to claim 14, wherein at least one of the X^{311} to X^{313} in Formula (31) or the X^{331} in Formula (33) is an ether group or a thioether group.

17. The electrophotographic photosensitive

member according to claim 1, wherein said polyhydroxymethyltrisphenol oligomer is a polyhydroxymethyltrisphenol oligomer having a structure in which a trisphenol monomer having a structure represented by the following Formula (4) has been condensed through a methylene group:

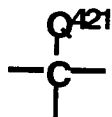


wherein Q^{41} to Q^{46} each independently represent a hydrogen atom, a halogen atom, a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms, a substituted or unsubstituted alkenyl group having 1 to 4 carbon atoms, or a substituted or unsubstituted alkoxy group having 1 to 4 carbon atoms; and Y^{41} represents a trivalent group having a structure represented by the following Formula (41), a trivalent group having a structure represented by the following Formula (42) or a trivalent group having a structure represented by the following Formula (43):



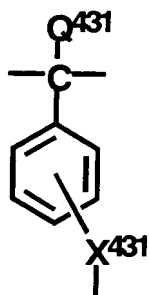
(41)

wherein X^{411} to X^{413} each independently represent a single bond, a carbonyl group, an ether group, a thioether group or a $-CR^{01}R^{02}$ -group, where R^{01} and R^{02} each independently represent a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms; and Q^{411} to Q^{413} each independently represent a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms;



(42)

wherein Q^{421} represents a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms; or



(43)

wherein X^{431} represents a single bond, a carbonyl group, an ether group, a thioether group or a $-CR^{01}R^{02}-$ group, where R^{01} and R^{02} each independently represent a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms; and Q^{431} represents a hydrogen atom or a substituted or unsubstituted alkyl group having 1 to 4 carbon atoms.

18. The electrophotographic photosensitive member according to claim 17, wherein at least one of the X^{411} to X^{413} in Formula (41) or the X^{431} in Formula (43) is a divalent group having 3 or more carbon atoms.

19. The electrophotographic photosensitive member according to claim 17, wherein at least one of the X^{411} to X^{413} in Formula (41) or the X^{431} in Formula (43) is an ether group or a thioether group.

20. The electrophotographic photosensitive member according to claim 1, wherein said

charge-transporting material contained in said surface layer is a charge-transporting material having a hydroxyl group.

5 21. The electrophotographic photosensitive member according to claim 20, wherein said charge-transporting material having a hydroxyl group is a charge-transporting material having at least one group selected from the group consisting of a
10 hydroxyalkyl group, a hydroxyalkoxyl group and a hydroxyphenyl group.

22. A process cartridge comprising an electrophotographic photosensitive member and at
15 least one means selected from the group consisting of a charging means, a developing means, a transfer means and a cleaning means which are integrally supported, and being detachably mountable to the main body of an electrophotographic apparatus; the
20 electrophotographic photosensitive member comprising a support and provided thereon a photosensitive layer, wherein;

said electrophotographic photosensitive member has a surface layer containing:

25 at least one of a charge-transporting material and conductive particles; and

a polymer obtained by polymerizing at least one

selected from the group consisting of a
polyhydroxymethylbisphenol monomer having 2 or 3
benzene rings and 2 to 4 hydroxymethyl groups; a
polyhydroxymethylbisphenol oligomer having a
5 structure in which a bisphenol monomer having 2 or 3
benzene rings has been condensed, and having 2 to 4
hydroxymethyl groups; a polyhydroxymethyltrisphenol
monomer having 3 or 4 benzene rings and 2 to 6
hydroxymethyl groups; and a
10 polyhydroxymethyltrisphenol oligomer having a
structure in which a trisphenol monomer having 3 or 4
benzene rings has been condensed, and having 2 to 6
hydroxymethyl groups.

15 23. An electrophotographic apparatus comprising
an electrophotographic photosensitive member, a
charging means, an exposure means, a developing means
and a transfer means; the electrophotographic
photosensitive member comprising a support and
20 provided thereon a photosensitive layer, wherein;
said electrophotographic photosensitive member
has a surface layer containing:
at least one of a charge-transporting material
and conductive particles; and
25 a polymer obtained by polymerizing at least one
selected from the group consisting of a
polyhydroxymethylbisphenol monomer having 2 or 3

benzene rings and 2 to 4 hydroxymethyl groups; a
polyhydroxymethylbisphenol oligomer having a
structure in which a bisphenol monomer having 2 or 3
benzene rings has been condensed, and having 2 to 4
5 hydroxymethyl groups; a polyhydroxymethyltrisphenol
monomer having 3 or 4 benzene rings and 2 to 6
hydroxymethyl groups; and a
polyhydroxymethyltrisphenol oligomer having a
structure in which a trisphenol monomer having 3 or 4
10 benzene rings has been condensed, and having 2 to 6
hydroxymethyl groups.